

# NC Legislative Commission on Global Climate Change -- CAPAG Update

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#### Introduction

- First Round of Recommendations Will Come From CAPAG After Its Meeting on January 24, 2007
- Results of Draft Mitigation Options Are Preliminary
  - Several in process of being quantified
  - Not yet considered by CAPAG
  - Design and analysis may be modified by the CAPAG at the next or subsequent meetings
- Considerable Opportunity for Economic Benefit to NC Through the Mitigation Options Being Considered
- Comment and Advice From LCGCC Welcome

### Today's LCGCC Meeting

- Review Draft CAPAG Mitigation Options
  - Summary list of draft options and initial results
  - Detailed draft mitigation option templates at www.ncclimatechange.us
  - Beginning of CAPAG voting process on final recommendations
  - Beginning of CAPAG process of formulating alternatives to address barriers to consensus
  - LCGCC feedback helpful to CAPAG decisions

#### Next LCGCC Meeting

- Review Results of CAPAG Meeting #5 on January 24, 2007
  - First round of approval by CAPAG on individual mitigation options
  - Additional CAPAG meetings will continue process of identifying agreement, structuring further development of options with barriers

### Interim Report to LCGCC

- Progress on development of draft CAPAG mitigation policy options
  - Summary list and initial results of analysis
  - Detailed initial results of analysis for each mitigation option
  - Detailed descriptions, design and template for each mitigation option
  - Potential cumulative GHG reduction and cost/cost savings for all draft mitigation options

#### CAPAG Work Plan

- Meetings in May, July to finalize recommendations
- Additional meetings possible
- LCGCC feedback can be considered as input to decisions
- Final report with recommendations and analysis to DENR from CCS at conclusion
- CAPAG can provide additional development of final recommendations of interest to LCGCC, if/as needed
- DENR, CCS can provide technical assistance on development of LCGCC recommendations, if/as needed

# Draft CAPAG Mitigation Options

- Current Number of Draft Potential Mitigation Options (52)
  - Residential, Commercial and Industrial (11)
  - Energy Supply (10)
  - Transportation and Land Use (13)
  - Agriculture, Forestry and Waste Mgmt (12)
  - Cross Cutting Issues (6)
- Original Number of Potential Options from Catalog of States Actions (251)
- Updated Number of Potential Options, Including CAPAG Additions (307)

### Draft Mitigation Option Template

**Mitigation Option Description** 

**Mitigation Option Design** 

**Implementation Mechanisms** 

**Related Policies/Programs in Place** 

Types(s) of GHG Reductions

Estimated GHG Savings and Costs per MTCO2e

**Key Uncertainties** 

**Additional Benefits and Costs** 

**Feasibility Issues** 

Status of Group Approval and Level of Group Support

**Barriers to Consensus, if Any** 

# Key Decision Variables for Draft Mitigation Options

- Design
  - Goals, Timing, Participation
- Type of implementation mechanism
  - Codes & Standards, Funding programs, Technical Assistance, Voluntary & Negotiated Agreements, Market Based Systems, Information & Education, Disclosure & Reporting, Etc.
- Analysis
  - Data sources, Methods, Assumptions

### Residential, Commercial, Industrial/Institutional

- 1. Demand Side Management Programs for the Residential, Commercial and Industrial Sectors
- 2. Expand Energy Efficiency Funds
- 3. Energy Efficiency Requirements for Government Buildings
- 4. Market Transformation and Technology Development Programs
- 5. Improved Appliance and Equipment Efficiency Standards
- 6. Building Energy Codes
- 7. "Beyond Code" Building Design Incentives and Targets, Incorporating Local Building Materials and Advanced Construction
- 8. Education (Consumer, Primary/Secondary, Post-Secondary/ Specialist, College and University Programs)
- 9. Green Power Purchasing (required for state facilities) and Bulk Purchasing Programs for Energy Efficiency or Other Equipment
- 10. Distributed Renewable and Clean Fossil Fuel Power Generation
- 11. Residential, Commercial, and Industrial Energy and Emissions Technical Assistance and Recommended Measure Implementation

### **Energy Supply**

- 1. Renewable Energy Incentives
- 2. Environmental Portfolio Standard
- 3. Removing barriers to CHP and clean DG
- 4. CO2 tax and/or cap-and-trade
- 5. Legislative changes to address environmental & other factors
- 6. Incentives for advanced coal
- 7. Public Benefit Charge
- 8. Waste to Energy
- 9. Incentives for CHP and clean DG
- 10. NC Greenpower renewable resources program

### Transportation and Land Use

- 1. Land Development Planning
- 2. Multi-modal Transportation & Promotion
- 3. Feebates to raise revenue
- 4. Feebates to change fleet mix
- 5. Truck-stop Electrification
- 6. Tailpipe GHG Standards
- 7 Biofuels Bundle
- 8. Procure Efficient Fleets
- 9. Anti-idling
- 10 Diesel Retrofits
- 11. Fuel tax (50 cents/gallon)
- 12. Pay As You Drive Insurance
- 13. Incentives for Advanced Tech Vehicles

# Agriculture, Forestry & Waste Management

- 1. Manure Digesters & Energy Utilization
- 2. Biodiesel Production (incentives for feedstocks and production plants)
- 3. Soil Carbon Management
- 4. Preserve Agricultural Land
- 5. Agricultural Biomass Feedstocks for Electricity or Steam Production
- 6. Policies to Promote Ethanol Production
- 7. Forest Protection Reduced Clearing and Conversion to Nonforest Cover
- 8. Afforestation and/or Restoration of Nonforested Lands
- 9. Expanded Use of Forest Biomass
- 10. Better Forest Management
- 11. Landfill Methane and Biogas Energy Programs
- 12. Increased Recycling Infrastructure and Collection

### Cross Cutting Issues

- 1. GHG Inventories and Forecasts
- 2. GHG Reporting
- 3. GHG Registry
- 4. Public Education and Outreach
- 5. Adaptation
- 6. Options for Goals or Targets (for CAPAG in support of LCGCC)

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